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Effectiveness on the Environment Based on Government Regulation Number 26 of 2023 concerning Management of Sedimentation Results in the Sea

Panji Riyadi[1], Zudan Arief Fakrulloh[2]
[1] *Universitas Borobudur, Indonesia*
[2] *Universitas Borobudur, Indonesia*

Corresponding Author: Panji Riyadi, E-mail; ptp4nji@gmail.com

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ABSTRACT
Marine sedimentation exploitation, regulated in Government Regulation No. 26 of 2023, aims to manage marine sedimentation results, including using sea sand for various economic interests. However, although this regulation aims to maintain the balance of the aquatic ecosystem, its implementation actually poses significant risks to the sustainability of coastal ecosystems, including the potential for small islands to sink. This study examines the impacts of marine sand exploitation on the environment, coastal communities, and the economic sector and evaluates the effectiveness of supervision and administrative sanctions in the regulation. The results of the study indicate that although this regulation includes various obligations for business actors, weak supervision and the lack of effective mitigation measures have the potential to worsen ecological, social, and economic impacts. Therefore, this study recommends a revision of the regulation that pays more attention to ecosystem sustainability and the involvement of coastal communities in decision-making related to marine resource management.
Keywords: *Administrative Sanctions, Environmental Impact, Government Regulation No. 26 of 2023, Sea Sand Exploitation.*

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INTRODUCTION

Indonesia is the largest archipelagic country in the world located in Southeast Asia. The country consists of more than 17,000 islands stretching between the Indian and the Pacific Ocean (Ajeeshkumar et al., 2021). Of these, around 6,000 are inhabited islands with varying sizes, ranging from large islands such as Java, Sumatra, Kalimantan (Borneo), Sulawesi, and Papua, to small islands that may only be a few hectares. Geographically, Indonesia is located between two continents, namely Asia and Australia, and two oceans (Ajmal et al., 2022). This strategic location gives Indonesia the potential

for enormous natural wealth, including natural resources and biodiversity. With more than 17,000 islands stretching along the equator, Indonesia is a prime example of an archipelagic country that faces special challenges and opportunities in terms of legal and territorial regulations. Around 70% of Indonesia's territory consists of the ocean, and it is clear that this country has abundant natural resource wealth, which raises environmental sustainability issues (Alamiery, 2023). Environmental conservation is now a widely discussed topic, raising awareness and encouraging public attention to environmental preservation in both developing and developed countries.

Indonesia, a maritime country with a vast water area, faces various challenges in environmental management, especially in coastal and coastal areas. The main problem faced is environmental damage in the area that has not been handled effectively. This damage is mostly caused by human activities carried out without proper planning and management (Amalina et al., 2023). The impacts include damage to marine ecosystems, decreased security in the area for fishing communities, and loss of their livelihoods. Although Indonesia has abundant natural resources, the lack of efforts to maintain and preserve them is a serious issue that must be addressed.

One of them is the existence of the sea which is one of the vital ecosystems that supports human life and plays an important role in maintaining the ecological balance of the earth (Asim et al., 2022). In addition to being a habitat for various biodiversity, the sea provides invaluable natural resources, such as fish and other marine products, which are the backbone of the economic life of coastal communities. The ocean also plays a vital role in mitigating climate change through its ability to absorb carbon dioxide and produce oxygen. For coastal communities, the ocean is not only a source of livelihood, but also an integral part of their traditions and culture (Buonomano et al., 2023). Thus, marine sustainability is essential to ensure the sustainability of ecosystems, economies, and human life as a whole.

Marine sedimentation occurs when solid particles, such as sand and mud, are carried by river or ocean currents and settle on the seabed (Busby et al., 2020). This process is a natural phenomenon that affects the dynamics of marine ecosystems, including the formation of deltas and changes in coastlines. However, excessive sedimentation, especially due to human activities such as land clearing or deforestation, can cause significant shallowing. This shallowing can reduce sea depth, disrupt shipping lanes, damage marine habitats, and affect fishermen's access to fish resources (Campelo et al., 2023). Therefore, the management of marine sedimentation results is an important issue in maintaining ecosystem balance and supporting human activities that depend on the sea.

Sea sand exploitation is considered one solution to manage sedimentation results, especially in the implementation of Government Regulation No. 26 of 2023 (Chauhan et al., 2023). This regulation aims to utilize sea sand accumulated due to sedimentation as construction material, reclamation, and infrastructure development projects. With proper management, sea sand exploitation is expected to overcome the problem of shallowing of waters that disrupt shipping activities and reduce the risk of flooding in coastal areas. [6] In addition, this effort is also aimed at increasing the economic value of marine

sedimentation results while contributing to national development (Cheng et al., 2020). However, the implementation of this policy requires a strict monitoring mechanism to ensure that exploitation is carried out sustainably.

Despite its positive purpose, the legalization of sea sand exploitation has drawn controversy due to its potential for damaging environmental impacts (Cheng & Whang, 2022). Sea sand mining activities can cause coastal abrasion that threatens the coastline, increase soil erosion around coastal areas, and disrupt marine ecosystems that are habitats for various biota. In addition, the loss of large amounts of sea sand can change ocean current patterns and cause small islands around the exploitation site to sink. This impact not only damages the ecological balance but also threatens the lives of coastal communities that depend on the sea as a source of livelihood (Chiong et al., 2021). Criticism is also directed at the potential for greater long-term losses compared to the short-term economic benefits obtained from sea sand exploitation.

Government Regulation Number 26 of 2023 was issued in response to the increasing problem of sea shallowing that disrupts shipping, fisheries, and coastal ecosystems in Indonesia (De Corato, 2020). This shallowing is largely caused by excessive sedimentation due to changes in current patterns, erosion, and human activities. In addition, this regulation is also designed to support national reclamation projects that require sea sand as the main raw material. The government views that the management of marine sedimentation results, including sea sand exploitation, can be a solution to increase the utilization of natural resources while supporting the development of strategic infrastructure (Filipczak et al., 2020). With this approach, it is hoped that marine sedimentation management can be carried out in a more planned and measurable manner.

Government Regulation Number 26 of 2023 regulates several important aspects related to the management of marine sedimentation results and sea sand exploitation (Devda et al., 2021). First, this regulation establishes a strict licensing mechanism for parties wishing to exploit sea sand, including the obligation to prepare an Environmental Impact Analysis (AMDAL) document. Second, it regulates the priority use of sedimentation results, such as for coastal reclamation, national infrastructure development, and domestic needs. Third, this regulation establishes administrative sanctions, such as fines and cessation of operations, for perpetrators who violate the provisions. In addition, there are provisions regarding the protection of affected coastal communities and the obligation of business actors to carry out environmental rehabilitation in mining areas (Gradl & Protz, 2020). This is intended to ensure that sea sand exploitation continues to pay attention to aspects of environmental sustainability.

Government Regulation Number 26 of 2023 has received a lot of criticism from various parties, including the community, environmental experts, and fishermen's groups (Gupta et al., 2021). They argue that this regulation prioritizes short-term economic interests over ecological and social sustainability. Environmental experts highlight that the ecological risk analysis has not been carried out properly. So, the potential for serious environmental damage tends to be ignored. Fishermen's groups also consider this policy to threaten their livelihoods due to the degradation of marine ecosystems and reduced fish

catches due to sea sand exploitation (Hossain et al., 2022). Other criticisms have also emerged regarding the minimal involvement of coastal communities in the decision-making process, which is considered to worsen the social impacts of this policy on the most vulnerable communities.

The potential for environmental damage due to sea sand exploitation is very significant, including the risk of small islands sinking around the mining site (Hussain et al., 2022). The loss of the sand layer that functions as a natural buffer can cause coastal abrasion which accelerates coastal erosion. In addition, exploitation activities can damage marine habitats, such as coral reefs and seagrass beds, which serve as habitats for various marine species to live and breed (Kalaj & Cohen, 2020). This damage not only threatens biodiversity but also reduces marine resources that are the mainstay of coastal communities and fishermen. As a result, fishermen lose access to their livelihoods, while coastal communities face the risk of increased flooding and ecosystem changes that disrupt the natural balance in their areas.

Evaluation of the effectiveness of Government Regulation Number 26 of 2023 is very urgent considering the importance of maintaining the sustainability of marine ecosystems as one of the main pillars of biodiversity and the livelihoods of coastal communities (Karmakar & Li, 2022). Sea sand exploitation activities regulated in this regulation have the potential to have broad environmental impacts, ranging from coastal abrasion to damage to marine ecosystems. Without adequate supervision, this policy can backfire on environmental sustainability goals (Kaun & Stiernstedt, 2022). Therefore, this study is important to assess the extent to which the regulation can support the wise use of marine resources while protecting the balance of the ecosystem.

This study is relevant to provide a scientific basis for developing environmental policies that are more sustainable and responsive to the needs of coastal communities (Kim et al., 2022). Sea sand exploitation not only affects the environment but also has a direct impact on the lives of people who depend on the marine sector for their livelihoods. In this case, this study aims to provide a balanced perspective between development interests and environmental protection (Lee et al., 2022). The findings of this study are expected to encourage the government to adopt a more inclusive policy approach and pay attention to social, economic, and ecological aspects holistically so that optimal protection is created for coastal communities.

RESEARCH METHODOLOGY

This research method uses a normative legal approach, which focuses on the analysis of applicable laws and regulations, as well as relevant literature to explore the problems being researched (Lee et al., 2022). This method is carried out by literature review, which involves collecting secondary data in the form of books, scientific articles, legal documents, and official reports related to Government Regulation No. 26 of 2023 and its impact on the management of sedimentation results in the sea (Liu et al., 2023). The analysis techniques used include conceptual, legislative, and comparative analysis. Conceptual analysis aims to understand the ideology and legal philosophy contained in the

regulation, legislative analysis to evaluate the suitability of the regulation with existing legal principles, and comparative analysis to compare the implementation of similar policies in other relevant countries, (Machín et al., 2024) to provide a broader perspective in assessing the impact and effectiveness of this regulation.

RESULT AND DISCUSSION

The coast is an area on the earth's surface located between the lowest point of the average sea level and the highest point of the average sea level. As an area that has strategic value, coastal areas have a very important role in various human activities, such as settlements, aquaculture, recreational activities, and transportation (Majeed Butt et al., 2021). Given the increasing demand and competition for land use in coastal areas, decision-making in the use of this limited land must consider the aspect of maximum profit and be accompanied by conservation efforts that pay attention to long-term interests. Therefore, a wise policy is needed in the management of marine and coastal space to ensure its sustainable use.

The coast is an area that is very vulnerable to physical changes that can occur due to natural factors or human activities. Natural factors that can cause physical changes to the coast include ocean currents, waves, and the morphological and lithological characteristics of the area. In addition, coastal vegetation that grows in the area also plays an important role in the stability of the coastal ecosystem. Meanwhile, human activities such as infrastructure development in coastal areas, coral reef destruction, and coastal land conversion such as mangrove deforestation for economic purposes, also contribute to changes in the physical condition of the coast that are faster and uncontrolled.

Physical changes that occur in coastal areas are often caused by erosion, sedimentation, and dredging and transport activities of sediment material that occur both parallel and along the coastline. Human activities involved in the exploitation of coastal natural resources, such as sea sand mining, can worsen this condition, resulting in a decrease in the quality of the coastal environment and accelerating the degradation process of existing ecosystems. Therefore, to maintain the sustainability of coastal areas as living spaces that support various human activities, management efforts need to be made that pay attention to the balance between the use and preservation of coastal ecosystems.

Sea sand exploitation, especially on a large scale, can cause significant environmental impacts and damage the balance of coastal ecosystems. One of the main impacts is coastal abrasion, which occurs due to excessive extraction of sea sand from coastal areas. The sand lost from the beach serves to stabilize the coastline and protect coastal areas from erosion (Mallakpour et al., 2021). When the sand is taken, the coastline becomes more vulnerable to strong sea waves, which can cause faster coastal erosion. This erosion not only reduces the area of coastal land, but also damages existing infrastructure, including fishing settlements, roads, and public facilities located along the coast.

In addition, sea sand exploitation also has the potential to accelerate the sinking of small islands, especially in archipelagos with fragile coastal characteristics. These small islands are highly dependent on the presence of sand and marine sediment to maintain

their stability. Excessive sand extraction disrupts the natural process of the formation and maintenance of these islands. In areas that are vulnerable to climate change, such as rising sea levels due to global warming, the loss of sea sand worsens this condition and can accelerate the sinking of small islands. This phenomenon especially impacts islands located in coastal areas of Indonesia, which are often home to fishing communities and are part of marine biodiversity.

In addition to erosion and the sinking of small islands, sea sand exploitation also has a very serious ecological impact, one of which is the destruction of marine habitats. Sea sand mining activities often involve dredging the seabed, which damages coral reefs, seagrass beds, and other marine ecosystems that are habitats for various marine species. Seagrass beds and coral reefs, for example, serve as shelter and breeding grounds for various types of fish and other marine organisms. The loss of this habitat threatens the survival of marine species that depend on it, thus disrupting the balance of the marine ecosystem as a whole.

In addition, this activity can cause a decrease in water quality around the mining site. Dredging the seabed to extract sand can lift fine sediments trapped in it, causing high water turbidity (Mollik et al., 2022). This turbidity prevents sunlight from penetrating the sea, which is essential for the photosynthesis process of algae and plankton that form the basis of the marine food chain. In addition, turbidity can interfere with the respiratory system of fish and other marine organisms that depend on clear water. Increased turbidity can also change water quality, potentially endangering the health of ecosystems and humans who depend on seafood for their livelihoods.

The policy that legalizes the exploitation of sea sand, as stipulated in Government Regulation Number 26 of 2023, has a huge social impact on the lives of fishermen and coastal communities. One of the most obvious impacts is the loss of livelihoods for traditional fishermen. Many fishermen rely on the existence of healthy marine ecosystems, such as coral reefs, seagrass beds, and abundant fish resources, to earn a living. When sea sand exploitation damages this ecosystem, the fish catch that is their main source of income is significantly reduced. In addition, the extraction of sea sand can damage the location where fish breed, thus disrupting the availability of fish that are the main source of food and livelihood for coastal communities. Disruption to people's lifestyles also occurs when sea sand mining activities have negative impacts that are not only limited to the loss of natural resources but also change the characteristics of coastal communities' lives (Pang et al., 2020). Communities that previously depended on the fisheries sector are now forced to switch to looking for other jobs that are not always easily accessible. Their lifestyles that previously depended on fishing traditions must now adapt to changing conditions. This can affect local culture and social relationships in coastal communities, which have long been closely connected to marine and fisheries activities. In addition, the increasing economic pressure due to the loss of livelihoods could trigger greater social change, including increasing poverty rates and dependence on social assistance.

The potential for increasing social inequality is also a serious threat due to this policy. In many cases, sea sand exploitation often involves large parties or companies that

have the financial and technical resources to carry out mining activities. Meanwhile, local communities, especially fishermen, tend not to have access or control over these activities. As a result, the economic benefits generated from the exploitation of these natural resources are enjoyed more by large companies and more powerful parties, while local communities, especially fishermen, do not get a fair share of these benefits. This inequality occurs not only in the economic aspect but also in terms of access to decision-making related to the policy. The lack of attention to the welfare of local communities and fishermen in this policy could exacerbate existing social inequality, causing greater social tension and dissatisfaction among coastal communities.

Sea sand exploitation, in accordance with the policy stipulated in Government Regulation Number 26 of 2023, does have a positive impact on supporting reclamation projects and national infrastructure development. Sea sand is an important raw material for land reclamation, which can be used to expand residential, industrial, and port areas, as well as for the development of other infrastructure such as roads and bridges (Qu et al., 2020). These projects have great potential to create jobs, increase investment, and accelerate economic development, especially in coastal areas and small islands. Thus, sea sand exploitation can be considered a driver for national economic growth, especially in urbanization and infrastructure development needed to support national development projects. However, beyond these short-term benefits, sea sand exploitation has significant long-term impacts on marine-based economic sectors such as fisheries. Most coastal communities depend on the sea as their main source of income through fishing activities (Rasheed et al., 2021). Healthy marine ecosystems, including coral reefs, seagrass beds, and other benthic ecosystems, provide habitat for various species of fish and other marine organisms. When sea sand is over-exploited, mining activities can damage these habitats, which in turn reduces the availability of fish and other marine resources. This damage to the marine ecosystem has a direct impact on the decline in fish catches, meaning that fishermen will have difficulty earning a living, or may even lose their livelihoods altogether.

Furthermore, environmental damage caused by sea sand exploitation, such as coastal erosion and decreased water quality, can worsen the condition of coastal ecosystems that support the fisheries sector. Changes in water quality due to sediment released from sand mining can cause damage to coral reefs and seagrass beds, two key elements in coastal ecosystems. Decreased water quality can also impact the health of fish and other marine organisms, which in turn will affect the catch of fishermen and the sustainability of the fishing industry itself. These impacts have the potential to reduce local food supplies that depend on fisheries, as well as increase fish prices and add to economic hardship for coastal communities (Reshmy et al., 2021). Over time, ecosystem damage caused by sea sand exploitation can also lead to greater dependence on imports of marine products, worsening Indonesia's dependence on foreign resources. This will reduce the economic independence of coastal communities and increase social and economic inequality between coastal communities and larger economic centers. In addition, impacts on marine

ecosystems can also reduce the attractiveness of marine-based tourism, which is an important source of income for some coastal areas.

Exploitation of marine sedimentation is now an important issue in the preservation of marine ecosystems, considering the negative impacts that can arise from exploitation that does not pay attention to the principles of ecosystem control. Without careful management, this exploitation can threaten the sustainability of marine ecosystems, which in turn has an impact on the sustainability of the environment as a whole. In response to this problem, the Indonesian government has regulated provisions regarding administrative sanctions in Government Regulation Number 26 of 2023 concerning the Management of Sedimentation Results in the Sea (Satam et al., 2023). Article 23 paragraph (1) states that business actors who violate the obligations in a number of provisions stated in the regulation may be subject to administrative sanctions. The sanctions referred to in Article 23 paragraph (2) include written warnings, temporary suspension of activities, revocation of sea sand utilization permits, cessation of activities, and/or administrative fines.

This regulation specifically regulates a number of obligations for business actors related to the management of marine sedimentation results, which are listed in several articles. Article 9 paragraph (5) emphasizes that the rehabilitation of coastal and marine ecosystems is an obligation that must be fulfilled by business actors (Selema et al., 2022). Article 10 paragraph (1) stipulates that business actors who clean up marine sedimentation results and utilize sea sand must obtain a sea sand utilization permit. Article 11 stipulates that business actors must pay attention to several aspects, including the sustainability of the lives of the surrounding community, the balance of preserving the functions of the coastal environment and small islands, and community access to cleaning activities.

However, although the Indonesian Government claims that Government Regulation Number 26 of 2023 was drafted with the aim of maintaining the balance of the marine ecosystem, this regulation can pose a risk to the survival of small islands along the coast. One of the potential impacts that is feared is the increased risk of small islands sinking due to the uncontrolled exploitation of sea sand (Shihab et al., 2023). From a simple logical perspective, the government's decision to reopen the tap for marine sedimentation exports is actually contrary to efforts to preserve sustainable marine ecosystems. As a result, although this regulation aims to maintain environmental balance, its impact could be detrimental, especially for small islands that are vulnerable to damage due to uncontrolled exploitation of sea sand.

The administrative sanctions stipulated in Government Regulation Number 26 of 2023 serve as the main supervisory instrument to address violations of regulations, including exploitation of sea sand and management of marine sedimentation products. Administrative sanctions are designed to provide preventive and dissuasive law enforcement, with the aim that business actors or individuals involved in environmentally damaging activities can be reminded and given appropriate punishment. Administrative sanctions, which include fines, temporary suspension of activities, or revocation of business licenses, are expected to suppress activities that are not in accordance with

regulations and reduce negative impacts on the marine environment. With these sanctions, it is hoped that business actors or individuals who exploit sea sand can maintain environmentally friendly operational standards.

However, even though administrative sanctions are already in the regulations, their effectiveness is often questionable. One of the main weaknesses in the implementation of administrative sanctions is the limitation in field supervision. Supervision of sea sand mining activities is often not carried out continuously and adequately, which causes violations to escape supervision and go undetected (Vijayan et al., 2023). This is due to several factors, such as the lack of supervisory personnel, limited supporting facilities to carry out monitoring in large and remote areas, and limited budget allocated for such supervision. In addition, the implementation of supervision that is hampered by complicated bureaucracy or indecisiveness in law enforcement often means that administrative sanctions are not implemented firmly and consistently.

The effectiveness of administrative sanctions can also be affected by the lack of transparency and accountability in the law enforcement process. In many cases, if supervision is not carried out comprehensively and sanctions are not applied quickly, business actors feel that there is no significant impact on the losses or potential damage they cause (Q.-Z. Xie et al., 2020). For example, if sanctions in the form of fines do not provide a large enough deterrent effect or are not balanced with other, more stringent actions, then there is a high possibility that business actors will continue their activities even though there are violations. In this case, the implementation of administrative sanctions needs to be strengthened with a more measured approach, such as providing incentives for compliance, as well as strengthening technology-based supervision systems that can monitor activities more effectively, such as using satellites or drones to monitor sea sand mining activities.

Furthermore, another challenge in the implementation of administrative sanctions is the aspect of coordination between various supervisory institutions. Management of sea sand exploitation involves various institutions, such as the Ministry of Environment and Forestry, the Ministry of Transportation, and the Ministry of Energy and Mineral Resources, each of which has its own supervisory role (Y. Xie et al., 2022). However, the lack of good coordination between these institutions often leads to overlapping supervision, or even delays in decision-making regarding the enforcement of sanctions. This shows that strengthening synergy between institutions is also an important key in increasing the effectiveness of administrative sanctions.

Government Regulation Number 26 of 2023 concerning the management of marine sedimentation results and sea sand exploitation has several significant weaknesses in addressing environmental impacts, especially in terms of ineffective mitigation measures. One of the main weaknesses is the lack of firmness and detail in the regulation on mitigating ecological damage due to sea sand exploitation. Although this regulation includes several provisions on environmental management, there are no clear and detailed instructions on the steps that must be taken by related parties to reduce ecological impacts such as coastal abrasion, damage to marine habitats, or disturbances to coastal ecosystems.

For example, regulations regarding post-exploitation ecosystem rehabilitation of sea sand or prevention of more specific and structured habitat damage are still minimal. This causes environmental damage caused by sea sand exploitation to tend not to be optimally minimized, and in many cases, the impacts actually last for the long term and are difficult to overcome afterward.

Another weakness in this regulation is the lack of emphasis on the precautionary principle and sustainable ecosystem-based management. One of the characteristics of sea sand exploitation that needs to be regulated in more detail is its impact on the sustainability of the marine ecosystem as a whole (Yap et al., 2021). Although PP No. 26 of 2023 includes management based on reclamation and infrastructure activities, this regulation does not pay enough attention to the balance of the ecosystem affected by sea sand mining. For example, sand dredging can cause a decrease in water quality and disruption of marine biota habitats. This policy does not sufficiently take into account a comprehensive assessment of the ecosystem's ability to recover after the damage occurs. Therefore, this policy requires further review of the precautionary principle to prevent further irreparable damage.

In addition, PP No. 26 of 2023 also still ignores the role of local communities and groups directly affected in the decision-making process related to the management of marine sedimentation results. Many policies are issued without taking into account input from fishermen, coastal communities, and groups that directly depend on marine ecosystems (Zhong et al., 2024). In fact, public participation and community involvement in environmental management are very important to ensure that the policies implemented not only benefit certain parties but also protect the rights and sustainability of local community livelihoods. In the absence of a more inclusive and transparent participation mechanism, this policy could fail to meet the needs and interests of the most affected groups.

To improve these weaknesses, PP No. 26 of 2023 should strengthen the environmental impact mitigation mechanism, both in terms of technical regulations and imposing sanctions for violations. Several steps that need to be added include stricter regulations regarding ecosystem rehabilitation, including the obligation for companies carrying out mining to provide funds for ecosystem restoration. In addition, a more comprehensive environmental impact assessment (AMDAL) and regulatory adjustments to accommodate climate change that affects marine and coastal ecosystems need to be included in the regulatory framework (Zaharieva et al., 2022). This policy could also be improved by emphasizing stricter supervision of the long-term impacts of marine sand exploitation activities, as well as increasing cooperation between agencies involved in marine ecosystem management, such as the Ministry of Environment, the Ministry of Maritime Affairs and Fisheries, and local governments.

CONCLUSION

PP No. 26 of 2023, despite having good intentions to address the problem of shallowing and supporting national reclamation projects, has had significant negative

impacts on the environment and coastal communities. The implementation of this regulation has led to damage to marine ecosystems, coastal abrasion, and disruption to the lives of fishermen and communities that depend on coastal ecosystems. Therefore, a revision of this regulation is urgently needed to strengthen supervision and control of sea sand exploitation, especially in efforts to mitigate environmental impacts. In addition, it is important to involve coastal communities in the decision-making process related to the management of natural resources in their areas, to ensure that the policies taken are not only economically beneficial but also consider social welfare and environmental sustainability. The development of policies that are oriented towards the sustainability of coastal ecosystems needs to be prioritized so that this regulation can create a balance between the use of natural resources and environmental preservation for the benefit of future generations.

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